



King County Solid Waste Division
Department of Natural Resources

Annual Report 2000

SEPTEMBER 2000



KING COUNTY
Department of Natural Resources

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Executive Summary

The 2000 Annual Report for the King County Solid Waste Division describes our major activities and accomplishments from July 1, 1999 through June 30, 2000. We continue to provide environmentally responsible transfer and disposal services for residents and businesses in King County. Equally important, we work to find new ways to reduce waste and expand upon our award-winning recycling programs.

This year, efforts to increase waste reduction and recycling in the region have been extremely successful among our residents, businesses, and schools. Nearly six thousand more households signed up for curbside collection of recyclables. The quantity of household hazardous waste collected by the traveling Wastemobile was up 31 percent. Programs such as the On-Farm Composting project have been initiated to help our region's farmers manage their organic wastes.

The Division has earned awards for our Business Recycling Online Directory and our internal WasteWise Program. To promote product stewardship, we launched aggressive new programs to reduce and recycle packaging material, targeting businesses such as the medical industry and others. We have enhanced many of our schools programs – starting with pre-schoolers and on up through high school – to continue to encourage the waste reduction and recycling habit.

After nearly two years of construction, a new refuse area was opened at the Cedar Hills Regional Landfill. In October 1999, Area 5 was opened while Area 4 undergoes final closure. The Division also began to prepare for a busy construction season at some of the County's transfer facilities. Over the next several years, a number of our facilities will undergo needed maintenance and repairs, as well as



The Division's Transfer Stations accepted almost 700,000 tons of waste in 1999.

preparation for eventual waste export. Two of the closed landfills for which the Division has custodial responsibility are being converted to new uses in the community – one of them has been transformed into little league fields.

In April 2000, the Division issued the *Draft 2000 Comprehensive Solid Waste Management Plan*, which outlines our plans for solid waste transfer and disposal services over the next 20 years. The draft plan was developed after months of gathering input from the cities in the planning area, private waste haulers, Division employees, and the general public.

The Division continues to benefit from using the knowledge and skills of employees to improve service, job satisfaction, safety and efficiency. We kicked off a new Employee Involvement Program over the last year, which includes a well-tracked employee suggestion system. An Employee Safety Incentive Program was launched. Employees came together and developed an employee-labor-management



Over 750,000 transactions took place at the Division's Transfer Stations in 1999.

work team to study our operations and where we can make service improvements. And a new team was formed to develop strategies for reducing our impact on the environment. This year, for the first time, we applied the Green Works criteria to our own operations and found that we far exceeded the recycling and waste reduction targets required for membership.

In September 1999, the Division's downtown Seattle staff moved to the new King Street Center after several years in the Yesler Building. King Street Center is an eight-story, medium-rise office building in Pioneer Square. Construction of this new building allowed the Department of Natural Resources to demonstrate its vision of the use of green building materials and sustainable design practices. The building is a model for the region, and we are proud to have been a part of the building's project team.

These are just a few examples of the kind of work that has been accomplished by the Solid Waste Division over the last year. Details on our operations and programs are featured in this 2000 Annual Report.

SECTION I

Waste Reduction and Recycling

The highest priority of the Division's overall solid waste management strategy is to reduce the amount of material that is disposed. The Division has partnered with the cities in King County to promote waste reduction and recycling. The Waste Reduction and Recycling team has focused its programs and efforts on four different areas: residences, businesses, schools, and organic materials.

RESIDENTIAL ASSISTANCE PROGRAMS

Single and Multi-Family Curbside Recycling

King County is responsible for collection of recyclables in the unincorporated areas, and the cities provide that service within their borders. Curbside recyclables collection began in unincorporated areas of the county in June 1991. The overall goal was to reduce waste generation and increase participation in curbside collection. In the last year, recycling tonnage collected from residences increased by seven percent. Subscriptions to curbside garbage and recycling collection increased by two percent – nearly 6,000 households signed up. Curbside collection of yard waste also increased by two percent to 103,000 tons.

Latex Paint Collection and Recycling Program

Three local paint companies, with a total of nine stores, continued their practice of collecting and storing unwanted household latex paint brought in by residents. Monthly brochure mailings and in-store promotional pieces have been used to advertise the collection sites. As a result of this program, 15,797 gallons of latex paint were collected.



Curbside garbage and recycling collection increased by nearly 6,000 households in 1999.

Used Motor Oil Collection and Recycling



Used motor oil from do-it-yourself oil changers is collected at approximately 145 private- and public-sector collection sites throughout King County. An estimated 365,000 gallons of oil was collected in the past year, about 73 percent of which was collected at private-sector sites. The amount of oil collected represents an estimated recycling rate of 24 percent percent of the total oil that could be collected – the same as in 1998 collection rates.

Special Recycling Events

Special recycling events are held by cities to collect materials that are not handled under curbside collection programs. These events are supported by the Division's City Optional Program (COP). The Division organizes similar events for unincorporated areas, and for cities that choose not to accept COP funding. In 1999, the cities and the county held 49 special recycling events. The events served

over 22,000 households and collected 3,300 tons of recyclable or reusable material.

Participating cities organize one or more special recycling event annually to collect at least four of the following items:

- Polycoated paperboard
- Plastics, numbered  though 
- PET & HDPE plastic containers
- Clean wood (untreated)
- Ferrous metals
- Textiles
- Tires
- Bulky wood waste (greater than 3" in diameter)
- Appliances
- Non-ferrous metals
- Reusable household goods

Grasscycling

In early 1998 the Division joined with 16 other agencies to reduce the quantity of grass clippings ending up in the trash or being hauled to composting facilities. Since then, an annual Grasscycling Program has offered a series of one-day events where people can buy discounted electric mulching mowers and trade in old gas-powered models. These mowers are good for air quality as well as waste reduction. Grasscycling 2000 outpaced its sales goals by 16 percent, and trade-in goals were exceeded by 24 percent. This year 3,400 mulching mowers were sold and 3,100 gas-powered mowers were recycled.

Wastemobile

As part of the Local Hazardous Waste Management Program, the Wastemobile provides mobile household hazardous waste collection for residents in cities and unincorporated areas of King County. The Wastemobile recycles approximately 44 percent of all wastes received and reuses another 52 percent as fuels. The remaining four percent is treated or incinerated.



The Wastemobile visited 26 locations throughout King County in 1999.

The Wastemobile visits 26 locations throughout King County each year and has more than 25,000 annual participants. Since its inception in 1989, the Wastemobile has collected more than 7,500 tons of household hazardous waste.

The Wastemobile accepts a full range of materials from King County residents, including:

- Paints and stains
- Solvents, adhesives, and other flammables
- Pesticides and poisons
- Hobby chemicals
- Cleaning products containing acids, bases, reactives, and oxidizers
- Motor oil and oil filters
- Antifreeze
- Vehicle batteries
- Fluorescent light bulbs and PCB ballasts

Between July 1, 1999 and June 30, 2000, the Wastemobile served 26,806 customers, an increase of 23 percent over last year. We collected 1,185 tons of household hazardous waste during this period, exceeding last year's volumes by 31 percent.

BUSINESS RECYCLING ASSISTANCE PROGRAMS

The Division is proud of the work we do to help King County businesses reduce waste and recycle. The Washington Department of Ecology recently recognized the Division at the 2000 Waste Reduction and Recycling Awards presentation. The Division was awarded second place in the Best Large Government category for its business assistance programs.

City Optional Program for Businesses

The Division grants money to cities through the City Optional Program to establish city-sponsored waste reduction and recycling projects for businesses. In 1999, \$230,000 was allocated for the non-residential portion of this grant program. Ten King County cities opted to use the grant dollars to provide assistance to businesses in their cities. These cities used grant money to encourage waste reduction and recycling in the business community through educational materials, promotion, and technical assistance.

The Green Business Directory

The Division produces the *Green Business Directory*, which lists more than 800 companies that take steps to recycle, prevent waste, prevent pollution, properly manage their hazardous waste, and protect our streams and lakes. It also helps educate the public about resource conservation, habitat protection, pollution prevention, and other environmental issues. The number of directories requested is up 17 percent from last year to 35,000. The directory received a 1999 Achievement Award from the National Association of Counties.



Business Pages Web Site

In November 1999, the Division unveiled the new Business Pages web site with information on sustainable building, recycling assistance for the construction industry, information about waste prevention, case studies on waste prevention and recycling, the Recycling and Reuse database, and news about emerging programs.

Business Recycling and Waste Prevention Online Directory

The King County Business Recycling and Waste Prevention Online Directory provides businesses with the information they need to recycle. The web site contains:

- **Online Recycling Directory** – information on recycling services including technical assistance, the reuse and recycling database, relevant publications, and contact information
- **Construction Recycling/Sustainable Building** – information on waste prevention at the construction site; construction, demolition, and landclearing debris (CDL) case studies; CDL guides; a plan for your job site; and green building practices
- **Waste Prevention** – information on how to prevent waste by commodity, waste prevention case studies, how King County can help, environmentally preferable purchasing, the Computer Recovery Project, and waste prevention by industry: medical, real estate, retail and apparel
- **Recognition Program** – information on Green Works, Construction Works, and the Green Business Directory
- **Newsletters** – such as *Recycling Works* and *Construction Works*

These resources are available to anyone with Internet access, 24 hours a day, 7 days a week. Previously, individuals had to contact staff during business hours with specific requests and receive the information in the mail or by fax.

Since this online resource became available in November 1999, the number of users per month has more



Since 1997, Construction Works members have recycled 52,000 tons of building materials.

than doubled to 1,000. The Business Recycling and Waste Prevention Online Directory won a National Association of Counties 2000 Achievement Award.

Construction Works

The Construction Works program recognizes builders and contractors who go the extra mile in reducing waste and recycling on the job. The Division has certified 16 builders as members of Construction Works since the program's inception in 1997. These members have recycled more than 52,000 tons of building materials – amounting to a net savings of more than a \$1 million in disposal fees.

Reusable Building Materials Exchange

The Division started an Internet-based exchange of used building materials in 1999. The Reusable Building Materials Exchange allows residents and contractors to post listings of used or surplus building materials that are available for sale or for free. The exchange also allows users to post notices about materials they are interested in acquiring.

The material exchange program is usually on DNR's Top 10 list of web sites visited by the public, with more than 7,000 visits in 1999.

CDL Technical Assistance

The Division has continued to provide technical assistance to the building industry. In 1999 about 100 requests for information were handled either in person or over the telephone. Additional resources were made available on the Division's web page, where visitors can download the latest recycling directories and obtain information on almost any aspect of jobsite recycling and waste reduction.

Product Stewardship

Many aspects of product design and packaging can have an impact on the environment, including the toxicity and recyclability of materials, the energy used in manufacturing the product, the amount or type of packaging material used, and the energy required to use or operate the product. As consumers, we often pay the price for poor design or excess packaging through solid waste disposal costs or creation of household hazardous waste.

There has been an increased interest in promoting product stewardship, a principle that encourages all actors in the life cycle of a product to minimize the impacts of that product on the environment. Under product stewardship, all participants in the product life cycle – designers, suppliers, manufacturers, distributors, retailers, consumers, recyclers, and disposers – share responsibility for the environmental effects of products.

Northwest Project Stewardship Council

To promote product stewardship in the Pacific Northwest, the Division and several other governmental agencies organized the Northwest Product Stewardship Council, a group of businesses, governments, and non-profit organizations working together to integrate product stewardship into our policy and economic structures. In April 2000, the Council coordinated a Products and the Environment Northwest conference at the Seattle Center, which drew more than 100 attendees. Two workgroups have been established to focus on developing product stewardship options for computers and tires.

Product Stewardship Demonstration Project

Along with the U.S. Environmental Protection Agency, Region 10, and Seattle Public Utilities, the Division initiated a Product Stewardship Demonstration Project in September 1999. The goal is to offer area businesses technical assistance, employee training, cost analysis, consumer education, and promotion of business efforts and achievements in product stewardship. By June 2000, the project partners had designed the program, selected two industries for participation – retail apparel and grocery-and conducted outreach within these industries to identify those headquartered in the Northwest. Thus far, five retail apparel businesses have demonstrated interest in working on various aspects of product stewardship

Packaging Reduction Project

Since mid-1997, the Division's Packaging Reduction Project has educated businesses about the benefits and methods of reducing and reusing packaging materials. To date, we have provided technical assistance to 154 businesses. In a recent e-mail survey of the businesses that received assistance, 30 percent indicated that they made changes in their packaging practices as a result of this assistance. Eighty percent of the survey respondents said that they would recommend the program to others.

Medical Industry Waste Prevention Round Table

By the end of 2000, the Medical Industry Waste Prevention Round Table will have completed five seminars on a wide range of waste prevention, recycling, and product stewardship topics. These seminars bring together medical industry professionals to address issues related to the handling of medical plastics, medical laboratory chemicals, and durable/reusable medical items, as well as environmentally preferable purchasing choices. The seminars have been well attended, with representatives from more than 15 hospitals and biotech companies. The most exciting outcome of these seminars, to date, has been to lay the groundwork for development of a recycling program for a specialized medical plastic wrap called bluewrap.



The Division laid the groundwork for a recycling program to collect bluewrap, a medical plastic wrap.

To make this program possible, we have partnered with federal and local agencies and with private organizations. Seminar content and other useful information is available via the King County Medical Industry Waste Prevention web pages.

National and Regional Waste Prevention Coalitions

To help agencies and organizations work together on waste prevention issues, the Division started the National Waste Prevention Coalition and the Northwest Waste Prevention Coalition. For the last five years, the Division has coordinated both coalitions.

Coalition projects include:

- **National Waste Prevention Coalition's Junk Mail Reduction Project** – The Coalition has become a national authority on the junk mail issue. In the past year, the Coalition and its junk mail reduction efforts have been mentioned in articles in the Washington Post, Good Housekeeping magazine, and a number of other national publications. The newest activity of this project is the "Reduce Business Junk

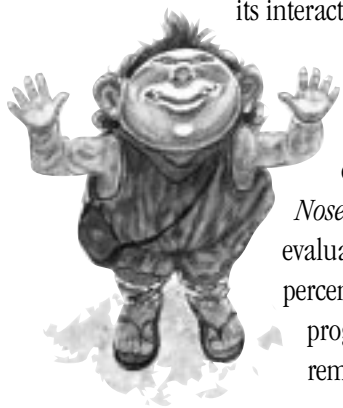
Mail” campaign. In the past, resources have been available to help households reduce unwanted mail, but not to help businesses. In November 1999, the Coalition launched its “Reduce Business Junk Mail” web site. This web site includes dozens of resources to help businesses and individual employees reduce their unwanted mail.

- **National Waste Prevention Coalition’s On-Line Information Sharing Project** – In the past year, the Coalition’s international e-mail network, the Waste Prevention Forum, has grown from 260 subscribers to more than 300. The Forum receives more than 400 messages a year.
- **Northwest Waste Prevention Coalition’s Reuse Project** – The Coalition and the Division hosted a meeting in April 2000 that brought together 36 leaders in product reuse from around the Pacific Northwest, representing used building material stores, thrift stores, textile collection operations, government agencies, consultants, and others. The attendees learned what others were doing, described their challenges and successes, and made important connections.

SCHOOLS PROGRAMS

Preschool and Kindergarten

The Division continues to provide waste reduction and recycling information to even the youngest students through its interactive storytelling program.



Participating classrooms can choose from two stories, *The Adventures with Zeela*, offered since 1997, and *Tikli’s Nose*, offered since 1993. In an evaluation completed in May, 94 percent of teachers rated the program as very good, with the remaining six percent rating it as

good. When teachers were asked to rate the extent to which the story drama was fun and enjoyable for their students, 88 percent responded very good and 12 percent said good. When asked if they would be likely to discuss the story drama with their class afterwards, nearly all teachers (98 percent) said they would.

Teachers were asked whether they felt the storybook would be useful in teaching about waste reduction and recycling concepts. Again, nearly all teachers (96 percent) responded positively. Seventy percent of teachers said they will improve their existing waste reduction and recycling program, and that they will reuse more materials in their classroom. In addition, ten percent said they will start a recycling program in their classroom.

Nearly all teachers, 98 percent, said they would recommend the program to other kindergarten classes in their school or district.

Elementary School

Assembly and classroom workshops

Based on feedback from teachers, the Division made some adjustments to its assembly called *Who Put the ‘R’ in Earth?*, which educates students on the interconnection of natural resource use, resource conservation, and waste generation. Assembly performers use an imaginary planet Earth to show how drab and lifeless Earth would be without natural resources. Students learn how waste reduction and recycling are linked to resource and habitat conservation. Students also learn which natural resources are used in manufacturing different types of packaging and everyday products. Students observe how their choices can lead to less waste and to resource and habitat conservation.

During the 1999-2000 school year the Division presented 110 performances to more than 25,000 students. In addition, 175 classroom workshops related to topics in the assembly were presented. An evaluation of student learning and teacher satisfaction with the program produced the following results:



The Department of Natural Resources Emmy Award winning television show 'Natural Connections' was distributed to 240 school teachers in King County.

- **Student Learning** – An aggregate score was calculated to provide a single measure of students' knowledge before and after participating in the program. At the time of the pretest, only 12 percent scored 80 percent or better. Students achieved higher scores at post-test, with more than half scoring at or above 80 percent.
- **Teacher Satisfaction** – Slightly more than one-half of teachers surveyed, 53 percent, gave the assembly the highest rating, very effective. Forty-four percent said the assembly was effective and three percent gave it a neutral rating.

With regard to classroom workshops, 67 percent of teachers rated them as very effective, 26 percent rated them as effective, and five percent rated them as neutral.

Green Teams

This year, 31 teachers formally registered their classrooms as Green Teams. Of the 205 general teacher survey respondents, approximately 30 percent said they had formed, or planned to form, a Green Team in their classroom. This means that as many as 60 classrooms may have formed a Green Team or at least engaged in Green Team activities, just among survey respondents.

Radio Disney

The Division continued its sponsorship of the weekly "Talking Trash" feature on Radio Disney, a station targeted at the 4 to 11 year-old range. Phil Dumpster, the featured character, was joined this year by Bert the Salmon and Squirt, a red wiggler worm, on several of his weekly adventures. The City of Seattle co-sponsored the production with the Division this year and we look forward to continuing our partnership into the future.

Secondary School

Natural Connections Programs

The Division offered a classroom workshop to middle and high school students based on the DNR Natural Connections television show (see Section 4). This pilot program was delivered at 11 schools to 45 classes, reaching a total of 1,350 students. The Division also distributed 240 free video copies of Natural Connections to educators in King County for classroom use.

Two contests were held to encourage further exploration of the Natural Connections themes. Over 300 students submitted entries in a poster design contest that provided participating schools with bins for their recycling program. A letter-to-the-editor writing contest was also held in which participating students composed informative and motivating arguments for environmentally beneficial behaviors. Contest winners were honored at an Earth Day ceremony.

Waste Busters Labs

These classroom labs on waste reduction and recycling have been a part of the School Program since 1990. Labs on resource conservation have been added in recent years. Middle schools can select from among five different labs, and high schools have a choice of two. During the 1999-2000 school year, 8,102 secondary school students participated in the classroom labs, about 1,000 more than the previous school year.



The Recycle Artist Program teaches waste reduction and recycling through art at 20 King County middle and high schools.

RecycleArtists

RecycleArtists is designed to attract the interest of middle and high school students by offering an opportunity to use exploratory and creative skills in learning about the environment. This year six local artists were hired to teach waste reduction and recycling through art. A theater group, a comic book artist, a video production team, a dance and music team, and a singer/songwriter developed projects at 20 different schools, involving more than 250 students. Three of the artists performed at the Earth Day celebration at the Seattle Center in April. As part of this program, a group of students from Skykomish High School attended the second annual Equinox Environmental Film Festival in Leavenworth and produced three short public service announcements about the environment. One of these videos won a prize this year at the 24th annual Young People's Film and Video Festival hosted by Portland Art Museum and Northwest Film Center.

Earth Day Student Green Space

At the Earth Day 2000 celebration at Seattle Center, the Division organized a Student Green Space consisting of

exhibits, activities, student entertainment, awards and performances by artists and students from the Division's RecycleArtist Program. Results of an on-site survey showed that 73 percent of participants viewed the event as valuable or very valuable, and 60 percent said their knowledge of what they can do to help the environment increased.

Household Hazardous Waste School Program

The Household Hazardous Waste School Program trains teachers in the use of the Hazards on the Homefront guide. The program also provides assistance to teachers through workshops and grants. One of the highlights of this program for the 1999-2000 school year was helping Chinook Middle School organize an environmental fair. More than 300 students participated in researching a topic related to household hazardous products and their effect on flora, fauna, and water quality, and presenting the results in displays for the community. This program is part of the Local Hazardous Waste Management School and Youth Program, which received the 2000 Community Catalyst Award from the Environmental Education Association of Washington.

Programs for Educators Directory

For the past three years, Division staff have produced the *King County Programs for Educators* directory. This useful directory provides "one-stop shopping" for those interested in knowing what educational programs and materials King County has to offer. The 1999/2000 edition listed several new programs and resources. About 2,500 directories were distributed to teachers and other educators during the 1999-2000 school year.

ORGANIC MATERIALS

One of the ongoing challenges for the Division is to reduce the amount of organic materials disposed in the landfill. Organic materials, traditionally considered a waste, consist

of food, wood, yard waste, soiled paper, biosolids, and agricultural livestock wastes. These materials currently comprise about one-third of the waste disposed of by King County residences, businesses, and farms. If managed properly, these materials can be used as resources to provide positive benefit to the environment and the economy.

Soils for Salmon

In 1999 the Puget Sound chinook salmon and the wild Puget Sound bull trout were listed for protection as threatened species under the National Endangered Species Act.



To help in the salmon recovery effort, the Division teamed up with other Puget Sound agencies and the Washington Organics Recycling Council. The Council and its member agencies have identified a unique opportunity to extend the beneficial uses of organic materials to help in the effort to save these species.

With a booming economy, the Puget Sound region is one of the fastest developing areas in the nation. Traditional construction practices often result in the disturbance and removal of several feet of native soil. With completion of a structure (house, apartment complex, office building), sod is typically placed on glacial till. The resulting soil profile that is left is dramatically altered from the native soil profile and can have significant impacts on surface water run-off with direct impacts on salmon habitat degradation. To help alleviate this problem, the Council designed a project called Soils for Salmon. The goal is to retain the native soil and/or incorporate soil amendment into new construction as another tool to support species recovery.

Over the last year, the Soils for Salmon program provided funding to the University of Washington, worked on soil amendment policy in the King County Draft Comprehensive Plan, and worked with the County's Road Services Division to determine their demand for compost.



Organic materials currently comprise about one third of waste disposed of in King County.

On-Farm Composting Project

In an effort to develop strategies to effectively and creatively manage organic waste, an On-Farm Composting project was initiated in 1999. The goal of the project is to diversify how organic materials are managed in King County, with less reliance on a few large composters. Medium- to large-scale farmers were recruited to attend an introductory session and subsequent training workshops. The training was geared toward helping farmers improve sustainable agricultural practices by better managing their waste and using less water and fertilizers.

The workshop series provided area farmers with information about composting agricultural and urban organic wastes, such as manure, crop residues, yard and garden debris, and pre-consumer food waste. Twenty-two people attended the introductory session, with 16-20 attending subsequent in-depth sessions. A unique and valuable aspect of this program is to offer one-on-one guidance through the regulatory and permitting process required to accept organic wastes from off-site sources. To date, three farmers have indicated interest in proceeding with the permitting process. The Division expects to continue the program for a second year and possibly expand the audience to other businesses, such as landscapers and golf courses.

SECTION II

Facilities and Operations

TRANSFER AND DISPOSAL FACILITY OPERATIONS

The Solid Waste Division operates King County's transfer and disposal system. The system comprises a regional landfill disposal facility, eight transfer stations, and two rural drop boxes for residential and non-residential self-haul customers and commercial haulers.

This chapter addresses the major maintenance and facility improvements as well as the ongoing environmental monitoring activities that the Division conducted from July 1, 1999 to June 30, 2000.

Landfill Area 5

On October 28, 1999, the Division opened Refuse Area 5 at Cedar Hills. Area Five has been nearly two years in the making, at a cost of about \$20 million. The floor and side slopes of Area 5 are covered with approximately 39 acres of high-density polyethylene and geosynthetic clay liners, with about eight miles of pipe for collecting and transporting leachate, gas, and stormwater. It is a state-of-the-art municipal landfill cell, built to meet or exceed the highest standards of current regulations.

Landfill Area 4

In December 1999 the Division ceased disposal of refuse in Area 4 at the Cedar Hills Regional Landfill. The phased closure of Area 4 began in 1997. Closure includes installation of final cover, new landfill gas collection, and new leachate and storm water management facilities.



The Division opened Refuse Area 5 of the Cedar Hills Regional Landfill on October 28, 1999.

Cedar Hills Facility Improvements

Cedar Hills is undergoing many facility upgrades, and construction crews have been busy making improvements over the last year. The construction project was split into two phases. The first phase began with the installation of more parking lots, with 43 transfer trailer and 150 employee vehicle parking stalls. For the on-site equipment repair shop, improvements included construction of two more welding bays, a tire shop bay, and a canopy for additional equipment maintenance. A vehicle repair building, fueling station, and truck wash building were also built. The existing underground fuel and oil tanks were replaced. The phase-one improvements were completed in July 2000.

Environmental Monitoring at Cedar Hills

The Division conducts extensive environmental monitoring at Cedar Hills which is designed to detect and assess environmental impacts of site activities. Monitoring activi-

ties include sampling and analysis of water from 33 groundwater monitoring wells, four domestic water supply wells, 12 surface water stations, and four wastewater monitoring stations. Additional depth-to-groundwater and surface water flow data are collected from eight wells and four surface water gauging stations. Division staff also monitor approximately 53 gas probes. Data obtained are summarized in reports to the Washington Department of Ecology and the Seattle-King County Board of Health. These reports are also maintained at King County Libraries.

Partnership with Seattle Goodwill to Collect Reusable Items

The Division is sponsoring a reusable collection project at the First Northeast Transfer Station. It began as a pilot in September of 1998 and became permanent in May 1999. Seattle Goodwill places one of its standard 20-foot-long collection containers at the station to accept reusable items, to sell in its thrift stores or to donate.

Since September 1998, more than 24 tons of furniture, toys, clothes, and other reusable items have been collected in this project. An estimated 70 percent of the items, are of sufficient quality for Goodwill to sell or donate (many of the items that are unusable by Goodwill are textiles or metal, which are recycled). The value of the items recovered is estimated at more than \$16,000.

In June 2000, Seattle Goodwill was named as a King County Earth Hero, as part of Executive Ron Sims' Earth Legacy 2000 program. Seattle Goodwill – which was only the second organization or business to be named an Earth Hero – received this award partly because of its partnership with King County on the First Northeast project.

Custodial Landfills

The Division has custodial responsibility for 10 closed landfills within King County – Bow Lake, Cedar Falls, Corliss, Duvall, Enumclaw, Hobart, Houghton, Puyallup/Kit Corner, South Park, and Vashon. The primary responsibility of the Division is to conduct environmental monitoring of



The 19.4-acre site on the former South Park Landfill, located in Seattle's Duwamish Industrial Corridor, is being offered for sale and development.

groundwater, surface water, wastewater, and gas. We also maintain cover and manage landfill gas and wastewater. Tests of more than 180 groundwater, surface water, and wastewater monitoring stations and approximately 100 gas monitoring sites are conducted throughout the year. Data from the tests are summarized in reports to the Washington Department of Ecology and the Seattle-King County Board of Health. These reports are also maintained at King County Libraries.

Using Custodial Landfills for Community Benefit

Recently the Division has been helping bring new life to former landfills. In March 2000, the Kirkland American Little League (KALL) opened two new ball fields at the site of the former Houghton Landfill. The Division worked with the City of Kirkland and KALL to develop the playing fields.

Plans for other custodial landfills are in the works. An airplane club, which is interested in leasing land, is reviewing the Hobart Landfill as a possible site. The 19.4 acre South Park Landfill in Seattle's Duwamish Industrial Corridor is being marketed by a broker for an industrial development that will provide and/or retain jobs within King County.

Special Waste Clearance Activity

Mixed municipal solid waste is accepted for disposal at all Division facilities, including the Cedar Hills Regional Landfill. As delineated in the County's Waste Acceptance Policy, certain waste materials are either conditionally accepted or prohibited from disposal in the County system. For the materials that are conditionally accepted, called special waste, specific handling instructions and conditions are imposed. These conditions are applied to ensure personnel and customer safety and environmental protection, and to minimize wear and tear on County equipment and facilities. These disposal instructions are provided via a Special Waste Clearance.

From July 1999 to June 2000, 345 special waste clearances were issued under the following categories:

Asbestos	14
Biomedical waste	21
Contaminated soil	17
Empty drums	11
Food products	19
Sewage grit	5
Industrial waste	93
Containerized liquids	6
'Other' waste	86
'Special' waste	12
Empty tanks	4
Dry vactor waste	8
Wet vactor waste	25
Animal waste	24

Community Litter Cleanup Program

In 1999, the Division partnered with the Washington State Department of Corrections, the non-profit organization Friends of the Trail, and property custodians to clean up litter and illegal dumpsites on public land and waterways throughout King County. The program, funded by the Washington Department of Ecology and administered by the Division, was responsible for the cleanup of 43 dumpsites.

These sites were on city, county, state, and federally owned property. In total, we disposed of more than 95 tons of garbage and recycled 1,764 tires, 75 appliances, and 25 abandoned vehicles using 2,148 crew hours.

One of the ongoing successes of this program, besides the removal of so much debris, has been the cooperation fostered between the Division and other public agencies to clean up problem sites and begin prevention measures. This regular collaboration has resulted in increased efficiency in the use of staff time and program resources, benefiting the community and the environment.

LAWSUIT SETTLEMENT

King County has agreed to pay \$16.5 million to the 4,000 residents who live in a 2.4-mile radius around the Cedar Hills Regional Landfill. The payment will settle the lawsuit that was filed against us in 1997 by neighbors.

With this settlement, Cedar Hills will not close sooner than planned. We will continue our current operations with no change in days or hours. We will continue to make improvements and work hard to be a good neighbor.

The settlement that was reached gives us these protections from future legal actions:

- We are released from any liability for impacts from the Cedar Grove Composting facility.
- The neighbors agree not to challenge our permits to develop and operate Areas 5, 6, and 7 at the landfill.
- The neighbors agree not to make further claims that the operation of the landfill reduces the value of their property.
- The neighbors give up the right to file class action lawsuits against us for five years.
- We are protected from claims by new property owners who move into the area near the landfill.

SECTION III

2000 Draft Comprehensive Solid Waste Management Plan

In April of this year, the Division issued the *Draft 2000 Comprehensive Solid Waste Management Plan* – marking the first update of the Plan since 1992.

The Plan describes how the region's garbage and recycling services will be managed over the next 20 years.

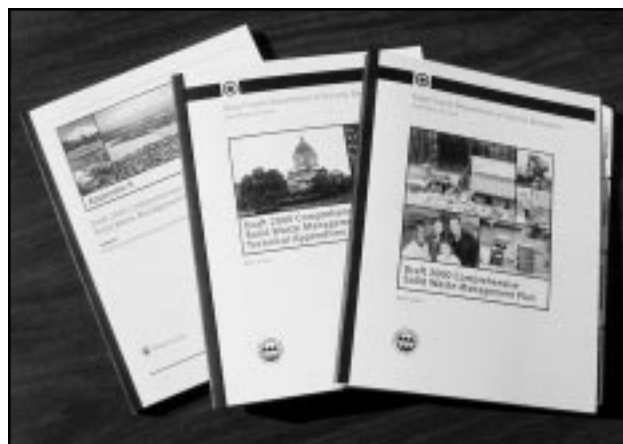
Preparation of the *Draft Plan* began in the spring of 1999. We met with key constituents to discuss the wide range of solid waste issues facing the region during this 20-year planning period, gathering input and suggestions from:

- Elected officials and solid waste coordinators from the 37 cities that are part of the regional system
- The private solid waste management companies
- The unincorporated area councils
- The Solid Waste Advisory Committee
- Solid Waste Division employees
- The general public. We held six public meetings across the County.

In all, more than 250 individuals contributed their ideas and expectations about solid waste and recycling services in the region. Suggestions from all of these participating groups form the basis of the proposed alternatives and recommendations developed in the Draft Plan.

The major issues discussed include:

- Expanding waste reduction and recycling programs, especially for organic materials which make up a substantial portion of what we throw away
- Making use of the Cedar Hills Regional landfill until it reaches its permitted capacity in 2012 and then exporting the region's garbage to an out-of-county landfill
- Continuing to analyze several options for upgrading transfer facilities so they are better equipped for exporting



The 'Draft 2000 Comprehensive Solid Waste Management Plan' describes how the region's garbage and recycling will be handled in the next 20 years.

wastes and efficiently handling the region's customers

- Keeping rates stable and low

The *Draft Plan* went out for public review in May 2000. After the Draft Plan was issued, we met again with all of the original contributors and held five more public meetings to gather comments. At the conclusion of the comment period on September 29, Division staff will revise the Draft Plan based on the comments received. The Final Plan will be released at the end of the year.

After the Plan is issued it needs to be approved by King County and cities representing 75 percent of the population of the jurisdictions acting on the Plan. This adoption process should be completed within 120 days after release of the Plan, at which point it goes to the Department of Ecology for final approval.

SECTION IV

Internal Programs

SOLID WASTE DIVISION COMPETITIVENESS PROJECT

The **Competitiveness Project** is looking at how the Division does business and comparing it to other agencies, both public and private, in the solid waste industry. This will help us to identify where we are doing well, where we can improve, and where we might want to expand our services. Through this project we are also developing Division performance measures.

Employee, labor, and management representatives have come together on a steering committee to provide direction to the Competitiveness Project, and to help provide the resources, information, and input needed to complete a competitiveness assessment study.

The project has three phases:

- **Phase 1** – Conduct a competitiveness assessment study and develop performance measures and benchmarks.
- **Phase 2** – Identify two to four processes for identifying elements of work activities; select employees to be trained in process mapping and to serve on process improvement teams; and recommend process improvements.
- **Phase 3** – Implement selected process improvements; evaluate and continue to refine improvements. Participants on initial process improvement teams will train and lead other employees through future process improvements.

Phases 1 and 2 will be completed during the first part of 2001; Phase 3 will begin in summer 2001, and will continue as part of the Division's on-going efforts to improve the way it does business.



The Competitiveness Project will identify what we do well and where we need to improve or could expand services.

The benefits of this project are:

- We will develop the performance measures we need to see where we are today and compare it to where we want to be, and track our progress.
- We will have a plan that will help us to be more efficient and effective in providing solid waste services to the public, through process improvement and possible expansion of service.
- We will include employees in the process to achieve our goals together.

ADDITIONAL PROGRAMS

Environmental Management System

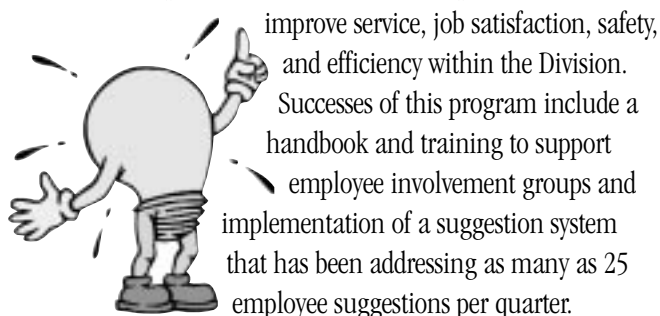
In October 1999, we started the Environmental Awareness Program to manage and document our efforts to minimize our impact on the environment and assure that

we comply with all environmental requirements. As an environmental agency, we need a system to better demonstrate to regulators, customers, employees, and neighbors that we are doing the best job possible and that we are committed to keep getting better. The Division's program has been selected to participate in an Environmental Protection Agency pilot project to implement environmental management systems. Fourteen municipalities from around the country are receiving technical assistance and training and we are all learning from each other as well.

Employee Involvement

The Division's ongoing efforts to encourage employee involvement are directly in line with Executive Sims' call for a better way to do County business.

We have successfully instituted a formal Employee Involvement Program to encourage employees to be involved in their workplace, and to identify and implement ways to



Safety Incentive Program

Workers compensation claims in 1999 were 16 percent below the previous year. In April 2000, the Division launched the Employee Safety Incentive Program to build on that trend. The program aims to reduce the number of accidents that result in time loss for the injured party. It was developed by a five member sub-committee of the Division's Employee Safety Advisory Board.

King Street Center

The Division expanded its initiative in promoting waste reduction and recycling to the construction industry by

adding a focus on "green" or sustainable building. Our new office building, the King Street Center, is a great example.

The King Street Center harmonizes with the neighborhood's historic architecture while modeling the latest in resource-saving materials and methods. King Street Center is the County's first project to be built by a partnership of public agencies and private contractors. The building's two major tenants, King County's Department of Natural Resources and Department of Transportation, wanted their new home to reflect their resource conservation goals. Developer Wright Runstad and general contractor Lease Crutcher Lewis and its numerous subcontractors faced the challenge with enthusiasm and ingenuity. They included progressive, environmentally friendly approaches in the building's design, construction, and operation, while staying within the project's budget and timeline.

The idea of a sustainable or "green" building rides on three basic principles: resource conservation, energy efficiency, and preserving and enhancing environmental quality. In keeping with the first principle, the King Street Center team managed to salvage and recycle 80 percent of its job-site materials. Included were 3,832 tons of concrete, 2,351 tons of contaminated soil, 668 tons of granite, 136 tons of wood waste, and 44 tons of steel. This outstanding effort qualified the general contractor for membership in the County's Construction Works Program. Construction Works recognizes companies that recycle on their job sites, use recycled-content building materials, and prevent waste from happening in the first place.

Walking on Broken Glass

King Street Center's modern interior does double duty as a showcase for recycled-content materials. Each elevator lobby is a "performance lab," demonstrating a different combination of recycled-content wall finishes and flooring. Visitors and staff tread on such materials as "Environmental Stones," non-porous floor tiles made with 100 percent recycled glass, and "ASTRA" concrete tiles, which contain recycled beer bottles.

King Street Center has 32,000 square yards of recycled carpeting, the most recycled carpet in one building on the West Coast. To make “Earthsquares,” the Milliken Company collects old carpeting, then cleans, fluffs, re-dyes, and re-patterns it. The recycled product is long-wearing, more cost-effective than new carpeting, and uses a water-based adhesive that does not emit airborne toxins. The appeal – both financial and aesthetic – of recycled carpet so impressed developer Wright Runstad that they are considering the product for use in other properties.

Greener Employees

Tenants started moving into King Street Center in June 1999, and were immediately met with improved options for waste prevention. King County’s Green Works Business Assistance program helped produce common-sense solutions to workplace waste, making the corner stone of the Department of Natural Resources “Waste Wise” program. In addition to using recycling bins in lunchrooms and beside desks, employees are encouraged to save paper by using electronic communication and storage and by making double-sided copies. A “re-use” room stores re-usable office supplies such as files, folders, and envelopes, saving money and resources. Lunchrooms come equipped with durable dishware and storage containers, and energy- and water-efficient dishwashers to clean them, cutting down on paper and plastic disposables.

The U.S. Environmental Protection Agency honored the Department of Natural Resources’ program with second place in the Local Government category for our internal waste prevention and recycling program.

While the building houses 500 parking spaces, it also encourages clean commuting. A designated bike room features rack space for 80 bicycles, and there are showers for bike commuters.

By participating in the building of King Street Center, the area’s most resource-efficient building to date, King County is setting an example for builders, taxpayers, and other local governments. Anyone visiting or working in the building is



The Division moved its downtown Seattle offices into the King Street Center in September 1999.

introduced to the quality of recycled materials; employees are learning enhanced recycling options for the workplace and home; and design and building professionals will have a new standard of what can be accomplished – on time and on budget – while saving resources. It’s an example worth building on.

Staff also completed work on the Sustainable Building Action Plan, participated in the formation of a local chapter of the U.S. Green Building Council, and began working on a program with the Master Builders Association of King and Snohomish County to promote sustainable building to the local home building community.

Division Qualifies as Green Works Member

The Division qualified for Green Works membership. At Cedar Hills and King Street, 46 percent and 55 percent, respectively, of the materials in the waste stream are being recycled. That is well over the 40 percent needed to become part of the Green Works team.

Green Works is a program that has been encouraging businesses in King County to recycle, use recycled product, and practice waste reduction strategies since 1993. More than 500 companies in King County are members.

SECTION V

Ongoing Issues

WASTE EXPORT

King County Ordinance 12378 directs us “to monitor and analyze conditions impacting the appropriateness, feasibility, and timing of waste export on a continuous basis, and to regularly report to the Council on such conditions.” In 1995 the Division developed a model to evaluate the economics of waste export. At that time the analysis showed that exporting waste before the Cedar Hills Regional Landfill is full was not cost-effective. Every year since then, we have updated the analysis and reached the same conclusion. The 2000 Draft Comprehensive Solid Waste Management Plan takes a detailed look at waste export. Today, the average direct operating cost of disposal at Cedar Hills is approximately \$23 per ton, while waste export costs for long-term contracts with larger local jurisdictions are approximately \$38 per ton. Since actual costs have not varied significantly since 1995, we have concluded that the Division’s waste export model is still valid and that filling Cedar Hills to its permitted capacity before exporting waste continues to be the least expensive disposal option for County ratepayers.



Containers of mixed municipal solid waste from the City of Seattle are loaded for export to an Oregon landfill.

SOLID WASTE PROJECTIONS

Current and Projected Disposal

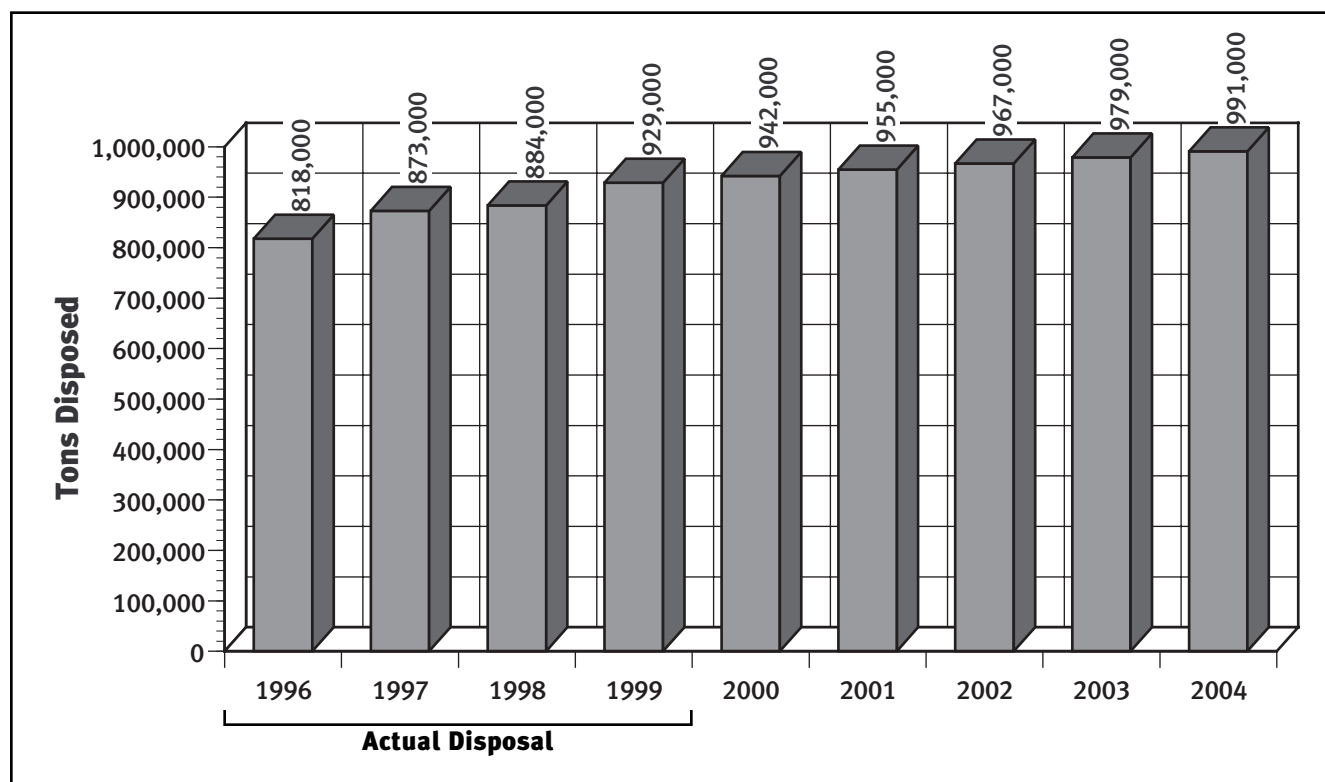
Solid waste (mixed municipal solid waste and special waste) tonnage received in 1999 was higher than projected (929,000 tons, five percent more than in 1998), due in part to strong economic growth. From 1998 to 1999, population in the Puget Sound region grew 1.9 percent, employment

grew two percent, and personal income grew 7.5 percent.

Solid waste forecasts are required for the Division’s operation. They are used in long-range planning for transfer and disposal systems, and in preparing annual budgets, setting disposal rates, and measuring the effectiveness of waste reduction and recycling programs. The Division’s forecasts were used extensively in development of the Draft 2000 Comprehensive Solid Waste Management Plan.

The Division uses an econometric model to forecast future waste tonnage. The model takes into account several variables including disposal tip fee, per capita income, employment, population, and others. Forecasts produced by this model are then adjusted to take into account program changes. During development of the Draft 2000 Plan, the model was revised to reflect higher than anticipated economic growth, resulting in higher solid waste forecasts.

Tonnage data through June 2000 reflect a slight leveling off in the rate of tonnage growth from that observed in 1999.

Figure 4-1. Projected Disposal Forecasts

The regional economic growth felt to be driving much of the higher tonnage is projected to continue to level off in 2000 and 2001. For these reasons, tonnage levels in 2000 and 2001 are anticipated to grow by a lower rate than that observed in 1999.

Disposal forecasts are projections, and actual numbers may differ somewhat. Variables include uncertainty in population and economic projections; changing relationships between tonnage disposal, population and economic growth; the inability to forecast natural events such as major storms;

unanticipated program and policy changes; technological innovation; and other unforeseen activities that affect waste generation and disposal.

There is also some uncertainty about what portion of the total waste stream will be disposed of at County facilities in the future. Changing technologies and practices in solid waste management, as well as changing laws and regulations, could significantly reduce the proportion of the waste stream handled at County facilities.

Appendix

The following appendix tables provide 1999 solid waste reference data.

Table A-1. 1999 Total Tonnage Disposed

System Origin	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Transfer System	156,365	176,212	185,086	175,258	692,921
Cedar Hills Regional Direct	59,175	54,352	52,770	48,125	214,422
Cedar Hills Other Waste	4,578	4,596	4,502	4,339	18,015
Total Cedar Hills	220,118	235,160	242,358	227,722	925,358
Rural Landfills	1,784	2,165	0	0	3,949
Grand Total Refuse	221,902	237,325	242,358	227,722	929,307
Yard Waste Recycled	251	510	421	203	1,385

Table A-2. 1999 Transfer Station and Drop-box Refuse Tonnage Disposed

Facility	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Factoria	35,027	40,363	40,420	41,388	157,198
Houghton	41,138	43,509	46,018	44,630	175,295
Renton	15,414	16,412	17,232	15,734	64,791
Algona	20,199	24,815	25,317	21,330	91,661
Bow Lake	26,945	29,897	31,419	30,751	119,012
First Northeast	12,578	15,161	15,512	13,520	56,771
Enumclaw	4,290	4,971	5,669	4,928	19,858
Vashon	0	66	2,459	2,147	4,672
Vashon Special Waste	0	0	0	6	6
Cedar Falls Drop-box	775	1,017	1,036	830	3,657
Total	156,365	176,212	185,082	175,262	692,921
Skykomish Drop-box ⁽¹⁾	275	297	226	225	1,023

(1) Skykomish Drop-box refuse is delivered to the Houghton transfer station and is included in figures for Houghton

Table A-3. 1999 Transfer Station and Drop-box Recycling Tonnage

Site	Mixed Paper & Newspaper	Corrugated Cardboard	Tin, Aluminum, Plastic & Glass	Total
Factoria	222	120	68	410
Houghton	317	239	105	661
Renton	376	146	147	669
Bow Lake	355	145	144	644
First NE	515	318	236	1,069
Enumclaw	357	79	183	619
Vashon	420	199	393	1,012
Cedar Falls	178	191	87	456
Skykomish	8	3	9	20
Snoqualmie	16	24	10	50
Grand Total	2,764	1,464	1,382	5,610

Table A-4. 1999 Curbside Residential and Non-Residential Recycling Tonnage

Site	Mixed Paper	News.	Card- board	Glass	Tin & Steel	Alum.	Plastic	Poly.	Yard Waste	Total
RESIDENTIAL										
Unincorp.	13,829	9,506	1,700	5,781	975	346	740	15	28,034	60,925
Incorp.	24,503	16,894	3,732	9,603	1,521	578	1,312	6	69,415	127,565
Subtotal	38,332	26,400	5,432	15,384	2,496	924	2,052	21	97,449	188,490
NON-RESIDENTIAL⁽²⁾										
Unincorp.	2,182	550	1,111	304	66	96	109	0	1,053	5,471
Incorp.	17,781	2,726	18,539	2,223	442	376	399	3	4,209	46,699
Subtotal	19,963	3,276	19,650	2,527	508	472	508	3	5,262	52,170
Grand Total	58,296	29,676	25,082	17,911	3,004	1,397	2,560	23	102,712	240,660

(2) Non-residential data includes data submitted to the County by the commercial haulers. It does not include recycling numbers from independent haulers and, therefore, may be under-reported.

Table A-5. Single-Family Curbside Collection – Service Subscribers

Area	Curbside Garbage and Recycling ⁽³⁾	Curbside Yard Waste
Unincorporated	91,854	30,920
Incorporated	161,048	100,874
Total	252,902	131,793

(3) All garbage customers have also been counted as recycling customers.

Table A-6. Single-Family Curbside Collection – Average Pounds per Month

Area	Pounds per Household per Month		
	Garbage	Recycling	Yard Waste
Unincorporated	139	67	151
Incorporated	142	70	115
Average	141	69	133

Table A-7. 1999 Transfer Station Disposal by Customer Type

Transfer Station	SELF-HAUL CUSTOMERS		COLLECTION COMPANIES	
	Tons Disposed	% of Total	Tons Disposed	% of Total
Factoria	26,506	17%	127,196	83%
Houghton	28,967	17%	143,871	83%
Renton	14,009	22%	49,389	78%
Algona	27,626	31%	62,377	69%
Bow Lake	31,073	27%	85,417	73%
First NE	30,548	56%	24,244	44%
Enumclaw	8,919	46%	10,447	54%
Vashon	5,949	72%	2,281	28%
Cedar Falls Drop Box	3,715	100%	0	0%
Total	177,312	26%	505,222	74%

Table A-8. 1999 Transfer Station Transactions by Customer Type

Transfer Station	SELF-HAUL CUSTOMERS		COLLECTION COMPANIES	
	Transactions	% of Total	Transactions	% of Total
Factoria	92,235	81%	21,136	19%
Houghton	103,430	80%	25,690	20%
Renton	63,431	89%	8,045	11%
Algona	112,404	89%	14,312	11%
Bow Lake	102,229	87%	15,947	13%
First NE	110,913	96%	4,415	4%
Enumclaw	37,346	95%	2,043	5%
Vashon	20,375	98%	487	2%
Cedar Falls Drop Box	18,536	100%	0	0%
Total	660,899	88%	93,075	12%

Table A-9. Total Refuse Tonnage Disposed, 1980-1999

Year	Rural Landfills	Transfer Stations	Cedar Hills Reg. Direct	Cedar Hills Other Waste	Total Disposed
1980	54,827	460,577	218,560	35,756	769,720
1981	44,280	509,680	244,417	50,755	849,132
1982	33,890	519,931	213,715	24,943	792,479
1983	32,318	498,643	206,691	9,566	747,218
1984	33,649	527,522	256,459	10,512	828,142
1985	36,862	568,342	268,795	13,592	887,591
1986	39,053	624,247	272,485	22,345	958,130
1987	36,979	681,472	595,058	28,165	1,341,674
1988	38,655	667,651	556,247	39,954	1,302,507
1989	41,614	712,156	476,602	55,462	1,285,834
1990	44,290	848,439	483,950	58,105	1,432,869
1991	28,553	814,919	258,319	53,014	1,181,969
1992	23,656	770,448	119,340	21,317	933,489
1993	21,020	716,437	144,973	24,740	901,217
1994	10,288	633,408	150,400	22,422	814,384
1995	7,388	642,498	146,024	26,610	822,520
1996	7,766	594,736	190,790	23,740	817,602
1997	8,110	607,256	229,007	24,448	872,384
1998	8,228	626,874	226,617	22,005	883,724
1999	3,949	692,921	214,422	18,015	929,307

Table A-10. 1999 Customer Service Inquiries by Type

Phone Inquiries	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.	Total
Composting/Recycling	2,110	1,769	1,793	1,062	6,734
City of Seattle referrals	577	577	643	555	2,352
TreeCycling	648	0	0	267	915
Special Collection Events	164	906	726	49	1,845
Home page inquiries	112	134	144	152	542
Complaints	4	7	2	3	16
Other	3,876	4,545	5,282	3,453	17,156
Total	7,491	7,938	8,590	5,541	29,560

Table A-11. 1999 Population Estimates and Housing Data ⁽⁴⁾

Jurisdiction	Population	Single-family Units	Multi-family Units	Mobile Homes
Unincorporated	387,148	111,740	21,313	9,964
Incorporated	748,457	174,981	126,690	9,792
Total	1,135,605	286,721	148,003	19,756

(4) Existing number of housing units, Sept. 1998. Source: 1999 Annual Growth Report

PUBLICATIONS

These materials about proper waste reduction, recycling, and disposal are available to King County citizens and employees.

Newsletters

Recycling Works business newsletter

Construction Works construction industry newsletter

Inside Trash employee newsletter

Brochures

Home Composting

Composting in Your Backyard

Yardwaste Recycling Options

Recycling at Transfer Stations & Landfills

Hazards on the Homefront

Cedar Hills Regional Landfill

How to Recycle Household Latex Paint at Retail Stores

Recycling Used Motor Oil in King County

Obsessed With Your Lawn

Grasscycling

Resource Guides

Your Guide to Curbside Recycling

Resource Guide to Recycling in King County

CDL Materials Management in King County

Guide to Recycling Major Appliances in King County

Wood and Wire Stationary Three Bin System

Portable Wood and Wire Composting Bin

1-2-3 Worm Composting Bin

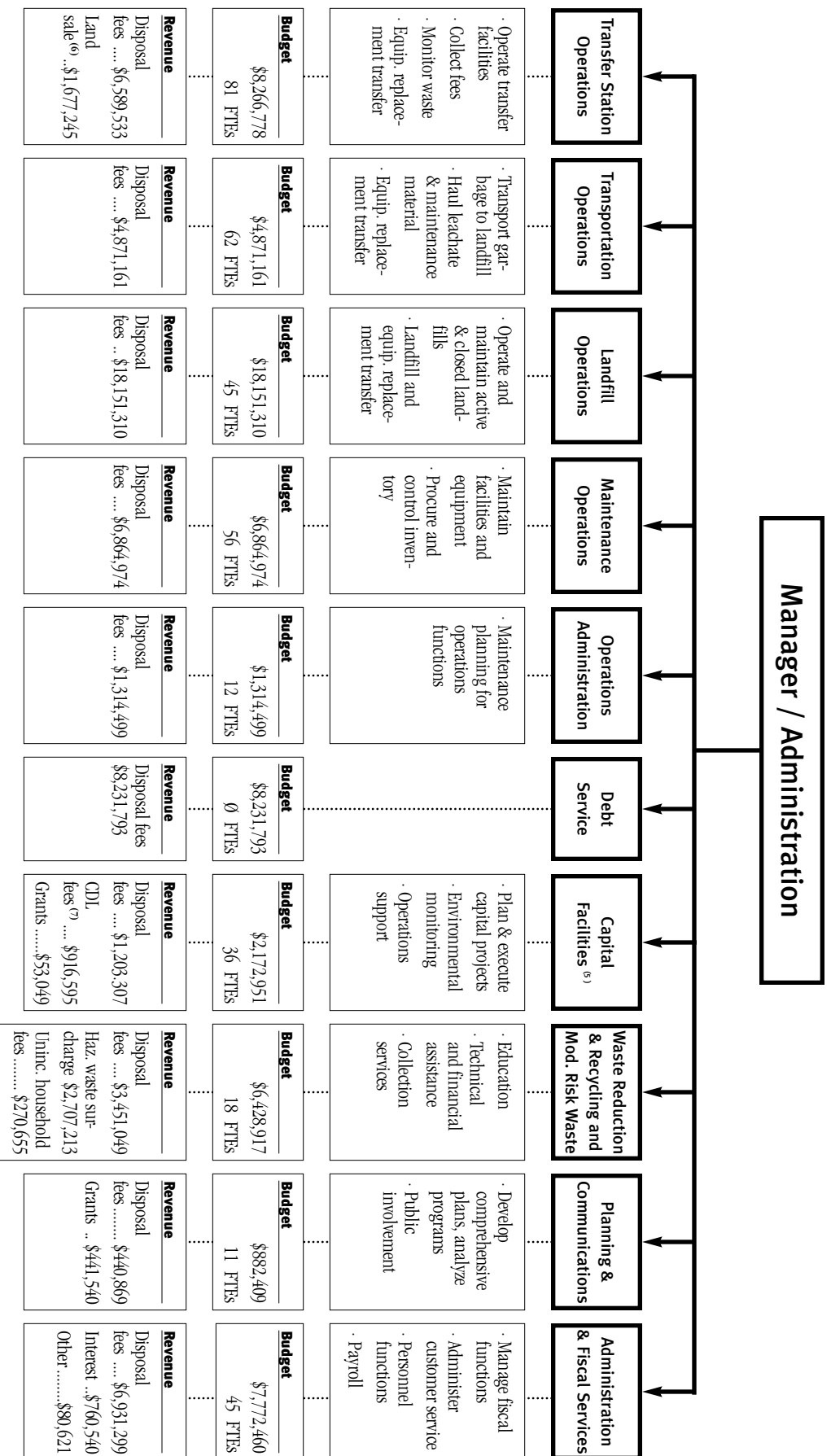
Composting Food and Pet Wastes

Guide to Worms and Worm Bins

Guide to Yard Waste Compost Bins

Household Hazardous Wastemobile Schedule

Chart A-12. Solid Waste Division Actual Revenues and Expenditures, Year ending 12/31/1999.



Summary of 1999 Actual Activity

1999 Total Revenues.....	\$79,104,561
Added to fund balance (<i>unmarked for capital improvement projects</i>)	\$14,147,309
1999 Total Operating Expenditures	\$64,957,252
1999 Total Employees	366 FTEs

5: Operating portion only of capital facilities budget; does not include debt-financed design/construction costs.

6: Sale of Northshore property originally intended to site transfer station.

7: Supports Construction, Demolition and Landclearing Program costs in Engineering Section.